## Claims

[c1]

[c2]

In a computer system providing access to at least one secure resource upon authentication of a user where said user authentication is performed by an authentication server in remote communication with a client in use by said user, a method of saving said user authentication for use when said authentication server is unavailable, the method comprising:

- submitting a user authentication request to said authentication server;
- in response to a successful user authentication;
  - receiving an authenticated user credential which is unique to said user;
  - storing said authenticated credential on said client utilizing a security method to prevent tampering with the credential;
  - using said authenticated credential to access said at least one secure resource.

The method of claim 1 further comprising:

- in response to an unsuccessful user authentication:
  - determining whether said authentication server is in operative communication with said client;
  - in response to a determination that said authentication server is not in operative communication with said client:
    - searching said client for a stored authenticated credential corresponding to said user;
    - in response to finding an authenticated credential corresponding to said user, using said stored authenticated credential to access said at least one secure resource;
    - in response to not finding an authenticated credential corresponding to said user, failing the user authentication request;
  - in response to a determination that said authentication server is in operative communication with said client:
    - erasing from said client any stored authenticated credential corresponding to said user;
    - failing said user authentication request.

[c3]

The method of claim 2 further comprising:

PAGE 10 of 18

- implementing a set of security policies limiting the use of authenticated credentials stored on said client to access said at least one secure resource depending on a defined sensitivity of said at least one resource.

The method of claim 1 wherein said security method is encryption of the [c4] credential.

The method of claim 1 wherein said security method is Public Key [c5] Infrastructure.

> The method of claim 1 wherein said security method is hardware-based Public Key Infrastructure.

The method of claim 2 wherein said security method is encryption of the credential.

The method of claim 2 wherein said security method is Public Key Infrastructure.

The method of claim 2 wherein said security method is hardware-based Public Key Infrastructure.

In a computer system providing access to at least one secure resource upon authentication of a user where said user authentication is performed by an authentication server in remote communication via a secure gateway with a client in use by said user, a method of caching said user authentication for use when said authentication server is unavailable, the method comprising:

- submitting a user authentication request to said authentication server;
- in response to a successful user authentication;
  - receiving an authenticated user credential which is unique to said user;
  - storing said authenticated credential on said client utilizing a security method to prevent tampering with the credential;
  - storing said authenticated credential on said gateway utilizing a security method to prevent tampering with the credential;
  - using said authenticated credential to access said at least one secure

[c6]

[c7]

[c9]

The method of claim 10 further comprising:

- in response to an unsuccessful user authentication:
  - determining whether said authentication server is in operative communication with said client;
  - in response to a determination that said authentication server is not in operative communication with said client:
    - determining whether said gateway is in operative communication
      with said client;
    - in response to a determination that said gateway is not in operative communication with said client:
      - searching the client for an authenticated credential corresponding to said user;
      - in response to finding an authenticated credential corresponding to said user, using said authenticated credential to access said at least one secure resource;
      - in response to not finding an authenticated credential corresponding to said user, failing the user authentication request;
    - in response to a determination that said gateway is in operative communication with said client:
      - searching the gateway for an authenticated credential
        corresponding to said user;
      - in response to finding an authenticated credential corresponding to said user, using said authenticated credential to access said at least one secure resource;
      - in response to not finding an authenticated credential corresponding to said user, failing the user authentication request;
    - in response to a determination that said authentication server is in operative communication with said client:
      - erasing from the client any authenticated credential

corresponding to said user;

- erasing from the gateway any authenticated credential corresponding to said user;
- failing the user authentication request.
- [c12] The method of claim 11 further comprising:
  - implementing a set of security policies limiting the use of authenticated credentials stored on said client or on said gateway to access said at least one secure resource depending on a defined sensitivity of said at least one resource.
- [c13] The method of claim 10 wherein said security method is encryption of the credential.
  - The method of claim 10 wherein said security method is Public Key Infrastructure.
    - The method of claim 10 wherein said security method is hardware-based Public Key Infrastructure.
    - The method of claim 11 wherein said security method is encryption of the credential.
    - The method of claim 11 wherein said security method is Public Key Infrastructure.
- [c18] The method of claim 11 wherein said security method is hardware-based Public Key Infrastructure.

[c14]

[c16]